PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program Stormwater Flood Management Grant, Round 2, 2013

| Applicant | Palmdale Water District | Amount Requested | \$5,500,000 |
|----------------|--|---------------------|--------------|
| Proposal Title | Littlerock Reservoir Sediment Removal Project | Total Proposal Cost | \$11,963,233 |

PROJECT SUMMARY

The project restores local water supply and flood control storage capacity at Littlerock Reservoir through removal of 900,000 net cubic yards (equivalent to 560 acre-feet) of accumulated sediment behind the Littlerock Dam. The project will construct a grade control structure to prevent sediment loss and head cutting upstream of the Reservoir beyond Rocky Point in order to protect and preserve habitat for the federally endangered arroyo toad. In addition to water supply and flood control via sediment removal, the project will achieve the following objectives: preserve habitat for a federally endangered species, improve water quality for PWD customers, and reduce energy consumption and greenhouse gas emissions.

PROPOSAL SCORE

| Criteria | Score/ Max. Possible | Criteria | Score/ Max. Possible |
|--|-------------------------|----------------------------------|----------------------------|
| Work Plan | 12/15 | Technical Justification | 2/10 |
| Budget | 3/5 | | |
| Schedule | 4/5 | Benefits and Cost Analysis | 9/30 |
| Monitoring, Assessment, and Performance Measures | 3/5 | Program Preferences | 7/10 |
| | | Total Score (max. possible = 80) | 40 |

EVALUATION SUMMARY

WORK PLAN

The criterion is fully addressed but not supported by thorough documentation or sufficient rationale. The work plan discusses project goals and relates the project to the IRWM plan, and the deliverables for most tasks are sufficiently detailed. However Task 10 "Environmental Compliance" is not sufficiently detailed with respect to the stated objectives of the project. Discussion of appropriate water quality monitoring pre- and post- project is not included. A data

management system will be developed but the application does not specify whether it will coordinate with the overall IRWM data management system, and the process to share monitoring deliverables is not specified. Flood damage reduction does not seem to be a priority goal of the project.

BUDGET

The criterion for the budget is less than fully addressed and not supported through sufficient documentation and rationale. It is not clear what constitutes discipline costs and no explanation of these costs is provided. There is no explanation as to why certain percentages of the total costs are used or what assumptions are made. Some referenced documentation could not be located within the submittal. Permitting fees are not included in the cost estimates. Overall, it is difficult to determine if the costs are reasonable

SCHEDULE

The schedule is consistent with the work plan and the budget and demonstrates a readiness to begin construction or implementation no later than October 2015. The schedule appears reasonable and shows start dates, end dates, and milestones for each task. Two construction cycles occur between the assumed award date of August 2013 and the construction start date of June 2015.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. The measurement tools and methods won't all effectively monitor project performance and target progress. For example, it is unclear how the water supply and flood protection targets are selected or calculated in Table 6-1 since 560 acre feet won't be the amount of extra water stored every year. It is dependent on the amount on rainfall in a given year. The habitat protection measurement tool is not clearly identified. Therefore, the target process won't always be viable or feasible. The metrics for the flood protection goal do not include decreased flood damage (although this is included in the technical justification section). The target for the habitat protection goal is not yet determined.

TECHNICAL JUSTIFICATION

The technical justification criterion is marginally addressed and documentation is incomplete and insufficient. Technical justification lacks documentation that demonstrates or supports the technical adequacy of the project the flood frequency summary doesn't describe the flood events. The flood damage reduction benefit of the project is not thoroughly explained and flooding due to overtopping isn't well documented. There is no substantial discussion of the damages due to a real flood event, just theoretical (pg. 7-9). The project seems to be a temporary fix since sedimentation could occur again over time. Per the Op Report (pg 74), the reservoir takes on 4,400 AF but the project brings the storage to 3,325 AF. It's unclear how the goal values were derived. There is no linkage made between how the documents that were provided support the statements made for the projects. An increase of water supply and other benefits seems to be wet year dependent. There is no supporting technical information provided to explain how the claimed benefit accounts for both wet and dry years. The benefits (energy reduction, GHG) claimed for taking less State Water Project is not an acceptable benefit because the water will still be moved south. The water quality justification for the project doesn't clearly identify the water quality of local source water.

BENEFITS AND COST ANALYSIS

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost and this finding is not well supported as the quality of the analysis or clear documentation is lacking. The net present value (NPV) of costs is \$17.69 million. Claimed benefits are flood protection, reduced Delta diversions, improved water quality by reduced Delta diversions, habitat restoration, energy conservation, GHG reduction and water supply. Flood control benefits are quantified, but they are apparently small (\$55,000 in NPV terms). GHG benefits are included in Table 14 but they are a small fraction of the quantified total. Energy savings are important, but this benefit is included in the avoided cost of SWP supplies. The benefit of reduced salt loading from SWP supplies is important, but the project will capture flood flows that would otherwise be lost to the ocean. (If not, then the water supply benefit itself should be heavily discounted.) Those flood flows include local salts which, because of the project, remain in the region's water supplies.

PROGRAM PREFERENCES

Applicant demonstrates a high degree of certainty that the proposal will implement 7 of the program preferences claimed (3 program preferences and 4 statewide priorities) and documents the magnitude and breadth of each that the Proposal will achieve (Table 9-6). The proposal will achieve the following: 1) Include regional projects or programs; 2) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR; 3) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; 4) Drought Preparedness; 5) Use and Reuse Water More Efficiently; 6) Expand Environmental Stewardship; and 7) Practice Integrated Flood Management.